#### PEI Watershed Alliance's feedback regarding Water Act Regulations Consultation

## April 16, 2021

The PEI Watershed Alliance is the umbrella organization for the 24 community based nonprofit watershed groups on Prince Edward Island. Our groups are active stewards within PEI's communities and seek communication and cooperation with local stakeholders (e.g., agriculture, aquaculture, forestry, local interest groups) in watershed management activities and environmental betterment.

The *Water Act* is of great importance to our membership and we have been following and commenting on the process since the beginning.

With regards to the proposed *Water Withdrawal Regulations, second consultation draft,* we provide the following input:

#### **Comments on Interpretation (Section 1):**

- i) Include a definition of "agricultural irrigation within Section 1 to provide clarity.
- ii) There is some concern regarding the "agricultural irrigation does not include research" (2) whereby high capacity wells are constructed for the purpose of research on irrigation and approved by the Minister. It should be specified that this potential loophole is limited only to the 5 wells that are being constructed as part of the current UPEI research proposal.

## Comments on Groundwater Exploration Permit (Section 2):

iii) In "Factors determining unacceptable adverse effect", 4 (b) and (c) the proximity of the well to other wells, watercourses and wetlands in the watershed should be amended to include holding ponds and read as such-

In determining whether the drilling, construction or reconstruction of the well will have an unacceptable adverse effect, the Minister shall consider the following factors in respect of the watershed in which the well is or is proposed to be located,

- (a) the availability of water in the watershed;
- (b) the proximity of the well to other wells, watercourses, **holding ponds**, and wetlands in the watershed; and
- (c) the potential impact of the well on the watershed and on other wells, watercourses, **holding ponds**, and wetlands in the watershed.
- iv) Under (8), where "authorized activities have commenced under a groundwater exploration permit but have not been completed before the expiry of the permit, and whereby the permit holder can apply to the minister for an extension of up to one year", there is concern that this may be used to start the construction process of holding ponds between now and June 16th with an application to the minister

to complete construction after the fact.

- v) Under (10) -Requirement to submit data, reports, other information—we would like to see these data be made publicly accessible within 30 days of the completion of the activity in addition to being submitted to the minister.
- vi) Include a public review process within the Groundwater Exploration Permits. Timely information on these permit applications should be made available to watershed groups and interested parties so that they are aware of high capacity withdrawal activity within their local communities.

# Comments on Water Withdrawal Permit (Section 3):

- vii) Under section 4 (2) *Rate of withdrawal, multiple sources,* we recommend that, in the case of multiple wells, the radius of 15m be expanded significantly when calculating the rate of water withdrawn from all sources and treated as a single source. This will reduce the ability to use many lower capacity wells to fill extremely large holding ponds when these wells are farther than 15 m apart.
- viii) Under section 4 (6), A person shall not withdraw water from a watercourse at a rate that exceeds 25 cubic metres per day for a purpose described in subsection (5) without a permit where the minimum width of the water in the watercourse at the time and location of the withdrawal is less than **one metre**. We recommend that this width be increased significantly as surface water withdrawal in such a small system will have ecological impacts. We recommend an increase to at least 2 metres and to also include a minimum depth as many of our streams are over-widened and shallow.
- ix) Under Interpretation, Section 5, Minster may require tests, data, information or plan (2c) *submit a drought contingency plan, acceptable to the Minister, for reduced water use during drought conditions*-we recommend this drought contingency plan be made public in order to ensure transparency and accountability (see comment xii)
- x) Inclusion of water quality in Section 5 (4) as a factor of unacceptable adverse effect. It is known that pumping from high capacity wells can lead to increased contamination of aquifers with nitrates and pesticides
- xi) Further clarification around the prioritization mechanism in Section 6 (6c) "based on degree to which the use serves the public interest." How exactly will this be determined? It is important that science is considered in this process rather than just economics and/or politics.
- xii) Inclusion of a clause within section 6 to immediately limit water in times of scarcity or drought. For example, if environmental flows are not being met in a creek or local domestic wells are going dry, include a mechanism to immediately limit water taking to minimize environmental impacts.

xiii) Include a clause regarding compensation measures to be implemented when landowners are negatively impacted by water taking processes. For example, domestic wells went dry because of high capacity well demand on the aquifer.

## Concerns with the proposed regulations:

- 1) Importance of having adequate baseline water quality and quantity data when determining whether water withdrawal will cause "unacceptable adverse effect" in our ecosystems. As noted within Canadian River Institute's Hydrological approaches for Environmental Flow Guidelines in PEI (Chimi-Chiadjeu et al 2019), more streamflow data is needed across the island to adequately calculate environmental flow levels. What standard monitoring approaches will be implemented across the island to collect this information? What is the role of watershed groups in this data collection and what resources will be provided to watershed groups to assist with this data collection? Watershed groups currently undertake monitoring including headwater surveys, flow measurements and water quality surveys, however, a comprehensive monitoring effort to support these regulations would require increased resources (\$\$) for groups.
- 2) Recognition that water resources are dependent on complex processes and cycles which can be impacted by many factors such as land-use practices. For example, water within aquifers is the product of recharge systems which involve larger landscapes (e.g., forest cover, amount of soil organic matter, etc) and atmospheric hydrological processes.
- 3) Efforts to discourage water export between watersheds on PEI. Water removed from one watershed should be returned and/or discharged into the same watershed if at all possible.
- 4) Importance of encouraging water conservation and efficiency for all users (rural, urban, domestic well, low and high capacity wells). We feel it is necessary to be mindful of our water use and the associated impacts on our ecosystems.

Thank you for the opportunity to participate in this consultation process and we look forward to continued dialogue on future *Water Act regulations*.

- Board of the PEI Watershed Alliance